

Mass nouns: What are they?

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I propose to address the question in the title by examining a class of predicates that resist combination with mass terms (Quine, Bunt):

- (1) a. ?The powder is round.
- b. ?The traffic is large.
- c. ?The snow is long.

If we paraphrase away the underlined adjectives we obtain felicitous examples:

- (2) a. The powder forms a circle.
- b. The traffic takes up a lot of space.
- c. The snow has considerable linear extent.

The challenge is to explain what goes wrong in (1).

I will adopt the following procedure. First, I will study the behavior of the adjectives of (1) in combination with plural count noun phrases:

- (3) The tables are round/large/long.

This will lead to the hypothesis that these adjectives are “stubbornly distributive”. For some reason, they do not allow collective readings (the missing collective readings can again be brought out with paraphrases – eg *the tables form a circle*). The challenge in (1) comes down to offering a semantics of mass nouns that explains their incompatibility with stubborn distributivity.

I will first carry out this procedure in the context of standard theories of plurals in which definite plural noun phrases are taken to denote ‘pluralities’ while their singular counterparts denote a different kind of entity, ‘singularities’. In this context, stubbornly distributive predicates are predicates that are true only of singularities, hence in (3), they can only be true of individual tables. The incompatibility with mass noun phrases exhibited in (1) leads directly to the dubious, but popular, “infinite divisibility thesis” according to which if something is in the extension of a mass noun, any part of that thing is too. The adjectives in (1) are looking for singularities but there are none in the extensions of the mass nouns used in the subject. The infinite divisibility thesis is problematic because it fails to accord with what speakers actually believe about (some) mass noun denotata (see Kamp & Reyle, p400, for a succinct description of this problem).

Next, I will carry out the procedure in the context of a semantics of plurals based on events, of the kind elaborated in Schein(1993, in prep). In this type of theory corresponding singular and plural definites are about the same kinds of objects, they differ in the number of objects claimed to be participating in the events described. In (3), we only speak about tables, there are no table pluralities. In this theory, distributive/collective ambiguities come down to the number of objects that participate in a described event. The collective statement *the boys met* describes a meeting event with multiple participants. On this perspective, stubbornly distributive predicates are event predicates that can be true only of single-participant events, one for each table in (3). Stubbornly distributive predicates are the opposite of collective predicates such as *meet* or *assemble* which are true only of multiple-participant events. I will advocate a natural extension to Schein's work according to which nouns, just like verbs, are event predicates. With that amendment, we diagnose the problem in (1) as follows. Mass nouns are collective-predicates – true only of multiple participant events. The trouble in (1) comes from conflicting requirements on the number of participants required in the events described – the mass noun wants many, the adjective wants one. This theory is neutral on the question of whether snow is composed of snowflakes or whether traffic is composed of cars and trucks.

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